Subject: Re: A strange behavior of sched_fair
Posted by akpm on Fri, 29 Feb 2008 07:08:20 GMT
View Forum Message <> Reply to Message

(cc containers list)

On Wed, 27 Feb 2008 17:51:35 -0500 Kei Tokunaga <tokunaga.keiich@jp.fujitsu.com> wrote:

> Hi Ingo,
>
> I am playing around with sched_fair and cgroup, and it seems like
> I hit a possible bug. Could you also check if that is a bug?
>
> Description of behavior:
> Start a cpu-bound task (t1), attach it to a cgroup (cgA), and let the
> task to run for a while (e.g. several tens of seconds or a couple of
> minutes would be adequate.) Then, start another cpu-bound task (t2)
> and attach it to cgA in the way described in "Steps to Reproduce" section.
> You will see t1 does not get run for a while.
> (The tasks may not have to be cpu-bound, but it is easier to see the
> behavior using cpu-bound tasks.)
>
> How reproducible:
> Always.
>
> Environments where I saw the behavior:
> 2.6.25-rc3 with resource management functions enabled on ia64 box.
>
> Steps to Reproduce:
> # mkdir /dev/cgroup
> # mount -t cgroup -ocpuset,cpu cpu /dev/cgroup
> # mkdir /dev/cgroup/{a,b}
> # echo 0 > /dev/cgroup/a/cpuset.cpus
> # echo 0 > /dev/cgroup/b/cpuset.cpus
> # echo 1 > /dev/cgroup/a/cpuset.mems
> # echo 1 > /dev/cgroup/b/cpuset.mems
> # echo $$ > /dev/cgroup/b/tasks
> # ./a.out & echo $! > /dev/cgroup/a/tasks (a.out is just a for-loop program)
> [Wait for several tens of seconds or a couple of minutes.]
> # ./a.out2 & echo $! > /dev/cgroup/a/tasks (a.out2 is just a for-loop program)
> [You will see a.out does not get run for a while by running top command.]
>
> Additional Info:
> a.out2 needs to be started from the shell of cgroup-b in order to
> reproduce the problem (, unless the system is UP.) Starting a.out2
> in the manner, se->vruntime (or something to create the se->vruntime)
> of a.out2 seems to be initialized to a small value, compared to the
> value of a.out. And the fair scheduler only runs a.out2 until the

> se->vruntime catches up with the se->vruntime of a.out.
>
> Thanks,
> Kei
> --
> Kei Tokunaga
> Fujitsu (Red Hat On-site Partner)

_____
Containers mailing list
Containers@lists.linux-foundation.org
https://lists.linux-foundation.org/mailman/listinfo/containers